What is milCloud® 2.0?

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milCloud® 2.0 Phase 1(m2P1) Contract Overview

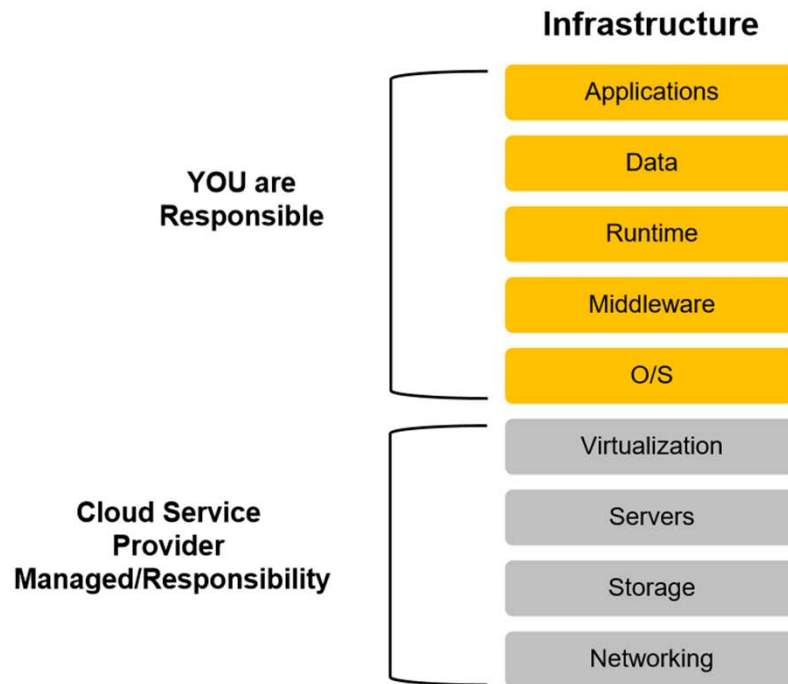|			
Acquisition	**Full and Open**	Contract value / ceiling	**$498M**
Contract Type	**Single Award IDIQ**		
Award	**June 2017**	Funded key milestones	**Initial Operating Capability and DoD Level 5 Provision Authorization within 9 months of award**
Period of Performance	**3-year base period, five 1-year option periods**		

- m2P1 was accredited in accordance with the DoD Cloud Computing Security Requirement Guide (CC SRG) for Impact Level 5 workloads and data with Privacy overlay. Mission partner will be required to obtain ATOs via the RMF process for their applications/environments within milCloud® 2.0.

- DISA holds the contract with the Cloud Service Provider (CSP)

- The Mission Partner will purchase and manage services through the CSP portal, but will supply funding through DISA
    - MIPR (448 or 7600)
    - Government Credit Card via PAY.GOV

- CSP will generate monthly billing, and DISA will manage invoicing via the Financial Management Liaison Office (FMLO)

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Cloud Models

Infrastructure as a Service (IaaS)

Infrastructure

YOU are Responsible:
- Applications
- Data
- Runtime
- Middleware
- O/S

Cloud Service Provider Managed/Responsibility:
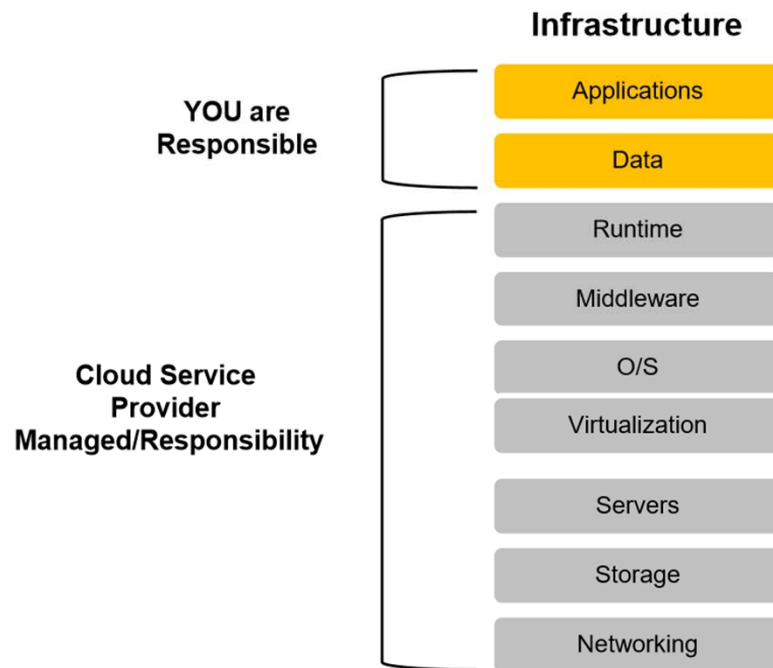- Virtualization
- Servers
- Storage
- Networking

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Cloud Models

Platform as a Service (PaaS)

Infrastructure

YOU are Responsible
- Applications
- Data

Cloud Service Provider Managed/Responsibility
- Runtime
- Middleware
- O/S
- Virtualization
- Servers
- Storage
- Networking

*These services will be coming in the future.

Cloud Models

Software as a Service (SaaS)

Infrastructure

Shared Responsibility (YOU and the Cloud Service Provider)

- Applications
- Data
- Runtime

Cloud Service Provider Managed/Responsibility

- Middleware
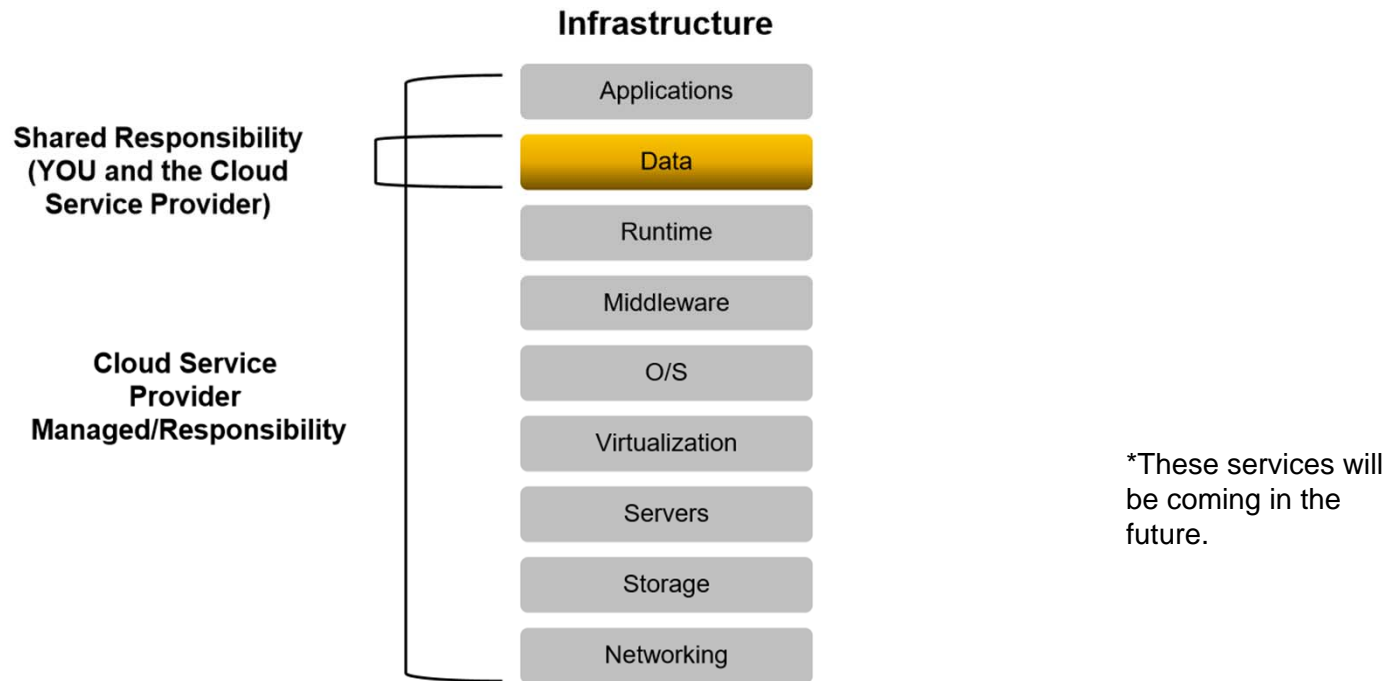- O/S
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Feature Overview

Agile, Secure, and Cost-Effective Technology

- Orchestration and Business Management capabilities provide a rich and fully capable IaaS customer experience
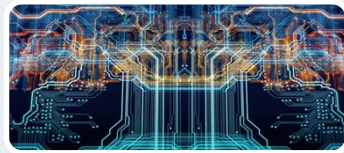
"Easy to Use" Infrastructure Management

- Continuous monitoring, updates, and upgrades with a "pay-as-you-go" catalog of IaaS and extended services.

Operational Resilience and Security

- Designed to meet FedRAMP HIGH and DoD Impact Level 5/6 baselines of security control requirements

Pool Resources Create Value

- Reduced facility and infrastructure costs
- Certified engineering and administration labor
- Reduce the impact of nonrecoverable downtime

- Maintain government security policy
- Inherited asset and vendor management
- Elastic and scalable server, storage, network

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Feature Overview
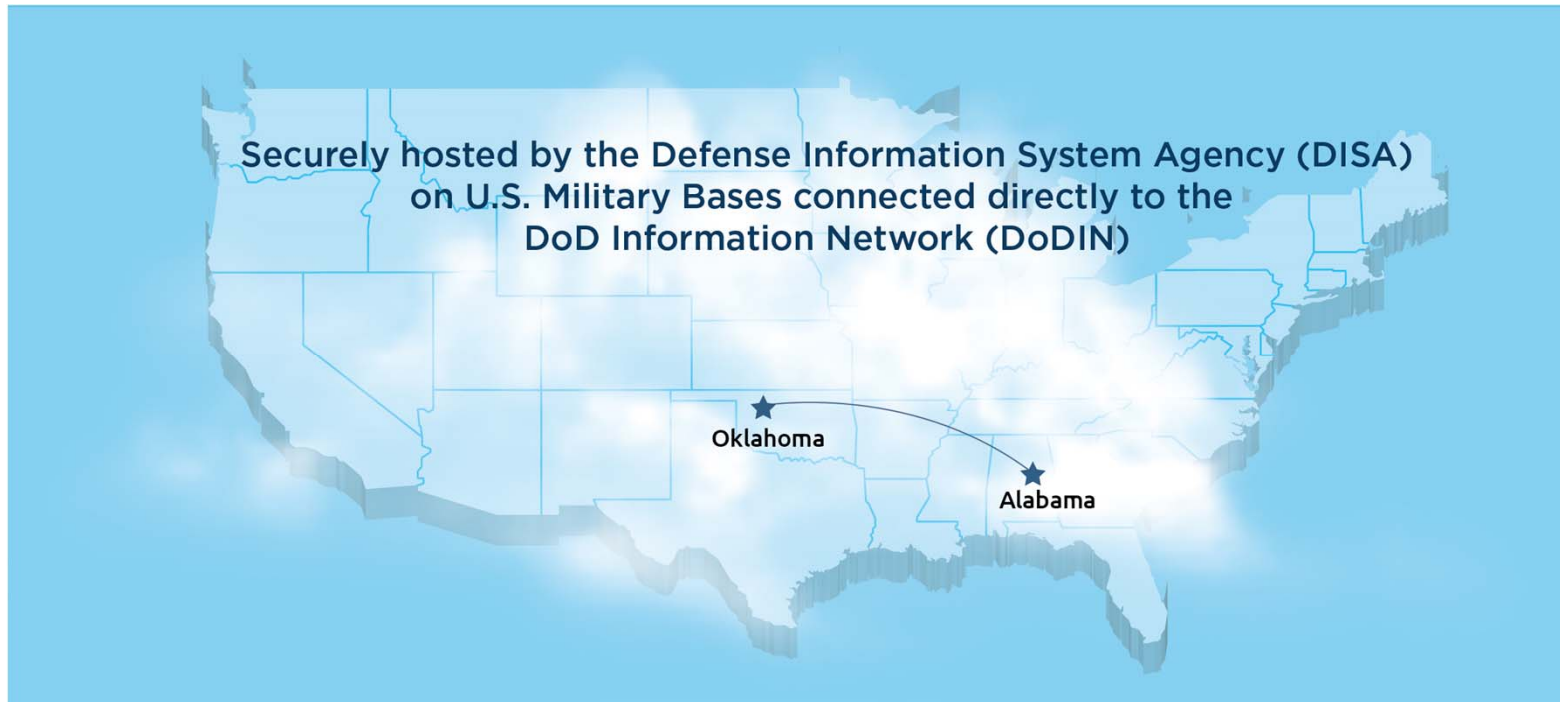
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What is milCloud® 2.0?

Overview

- Meets DoD requirement for cloud infrastructure services in its data center facilities

- Connects commercial cloud service offerings to DoD networks in a private deployment model

- Provides DISA mission partners the latest cloud technology at competitive prices without compromising performance

- Flexible infrastructure hosting services tailored for sensitive government systems

- On-demand applications and self-service technology that eliminate cost and complexity.

Initial Capabilities

- Pay for usage
- FedRAMP High, DoD Impact Level 5
- IaaS Solution on DoD premises
- Service availability: 99.9%
- Incident reporting and management system
- Workload transition into and out of commercial IaaS
- Fully supports CAC authentication
- Role-based account provisioning
- Self-management tools support billing, monitoring, reporting
- Metrics-based usage metering
- "Out of the box" reports, dashboards, and alarms
- Customizable to meet mission requirements

Provides Non-classified Internet Protocol Router Network (NIPR) infrastructure services as well as other services (to include enhanced features and transition services)

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What's New?

milCloud 2.0
Powered by CSRA

Metered Billing

- Only pay when it is in a billable state
  - Servers - only when allocated and powered on
  - Storage - only when allocated to a server or shared pool
- Finer billing units
  - Servers - by the hour
  - Storage - by the GB per day
- Monitoring and alerting
  - Always know how much you are spending, and how much you have left

Flexible funds utilization – Purchase Cloud "Units"

- Provide funds based on your initial estimate
- Configure and reconfigure as needed – Servers, Storage, Core Services

Funding

- Mission Partner must provide funds before receiving service
- Mission Partner is responsible to ensure that sufficient funds are available
- Service may be terminated if available funds are exhausted

Funding Mechanisms	Allowable Types of DoD Funding or LOAs
• Government Credit Card: Quickest Method • Funding Document (i.e. MIPR): milCloud provides tools to complete	• Operations and Maintenance (O&M) • Research, Development, Test and Evaluation (RDT&E) • Procurement • Defense Working Capital

IaaS Architecture Overview

DISA provided

- Two (2) Data Center locations (power, cooling, and floor space)
- Physical security and resilient facility infrastructure
- DODIN boundary protection (ICAP)
- Network Services (Replication Circuit and NIPR access)

CSRA provided

- Capitalized Infrastructure
- Remote management circuits
- Virtual Private Cloud and Virtual Machine capabilities
- Capacity Management
- Cloud Service Management

NPR

ICAP   data replication   **ICAP**

milCloud® 2 Site A   **milCloud® 2 Site B**

DISA Data Center   **DISA Data Center**

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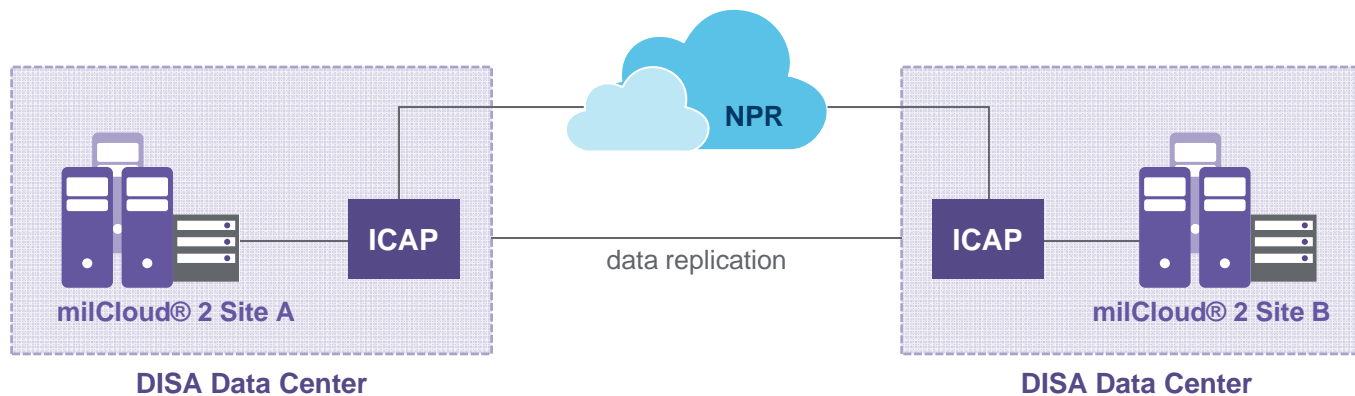
Acquiring Cloud Services

Onboarding
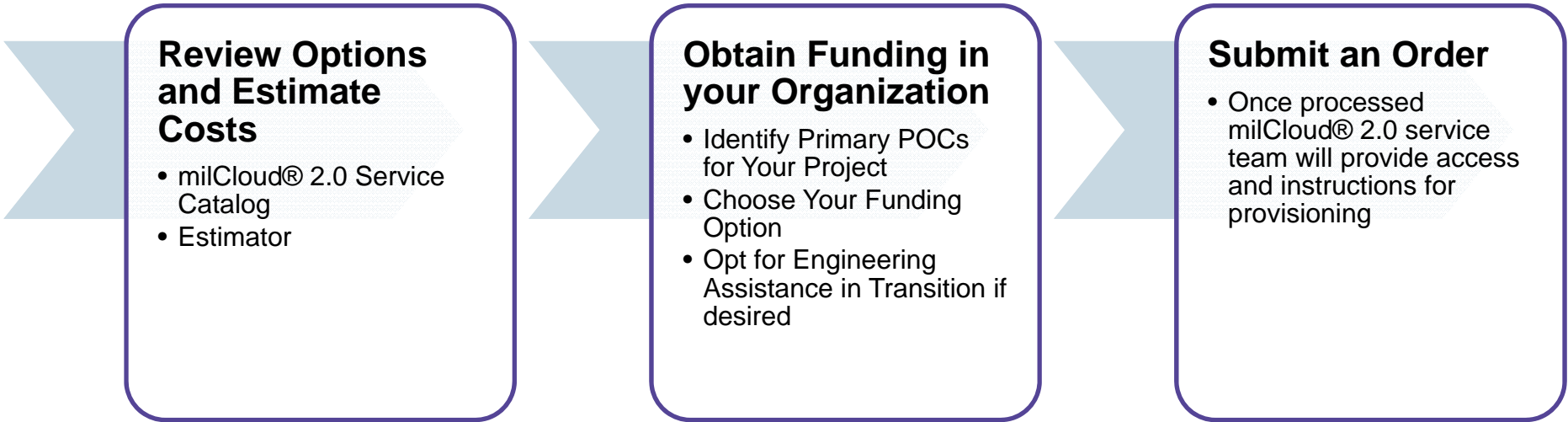
Review Options and Estimate Costs

- milCloud® 2.0 Service Catalog
- Estimator

Obtain Funding in your Organization

- Identify Primary POCs for Your Project
- Choose Your Funding Option
- Opt for Engineering Assistance in Transition if desired

Submit an Order

- Once processed milCloud® 2.0 service team will provide access and instructions for provisioning

Service Catalog and Getting Assistance
Onboarding

Product Family	Description
Compute	Virtual Machine (NIPR) Services
Storage	Block Storage and Backup Services
Network	Routable IP and VPN
Security	Patch Management, Logging, and Vulnerability Management
Other Services*	Security, Systems Administration, Platform-as-a-Service and Software-as-a-Service
Transition Services	Migration, application rationalization, agile development, and infrastructure strategy support

Other Services are planned in the milCloud® 2.0 roadmap, and many will be offered when milCloud® 2.0 is publicly available.

The milCloud® 2.0 Service Catalog is available as part of our Business Portal and Cost Calculator

https://csra.com/milcloud

http://disa.mil/Computing/Cloud-Services/MilCloud

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User Portals

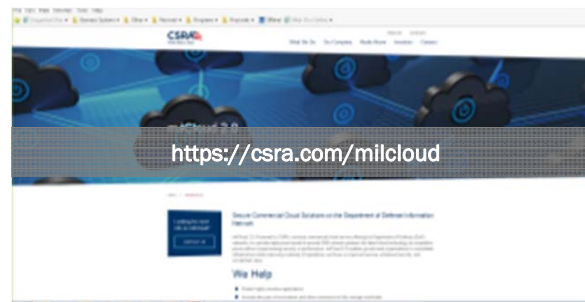| Business Portal	Provisioning Portal
Pricing Calculator, Financial Management, Service Procurement	Infrastructure Management & Administration

Considerations

Migration / Consulting

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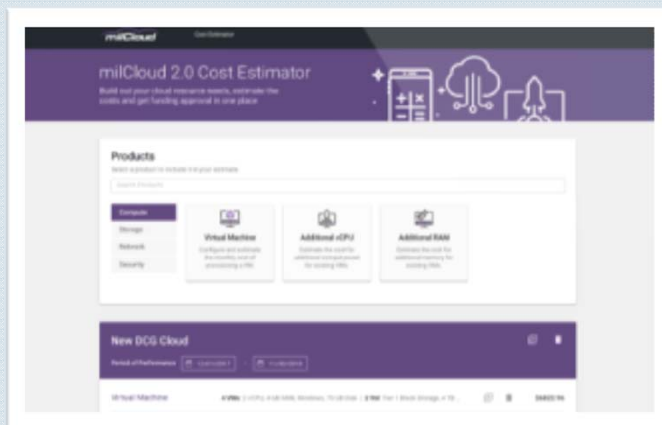| Network Traffic Flow	Applications or Infrastructure Not Ready	Service Desk Operations	Network Scaling
• East/West and North/South network traffic within the cloud environment(s) need to be considered and architected for each tenant and workload to avoid potential latency and maintain consistent security boundaries • Customers should consider impacts of network traffic flows and the introduction of additional security boundaries to their architectures	• Attempting to migrate applications or architectures that are not optimized or consistent with the desired cloud environment can cause serious problems or failures. • Customers should be conducting design reviews and application rationalization prior to cloud migration	• Transforming to cloud hosting may involve changes to operations and personnel to ensure issues are rapidly resolved across application and infrastructure tiers • Customers should be prepared for potential customer service calls and begin any migration process with customer outreach	• Servers and network devices may not be properly configured to handle large data transfer traffic that is typically related to cloud migrations • When migrating large workloads to the cloud, these should be planned during off-peak hours and planning should be conducted to minimize potential network impact

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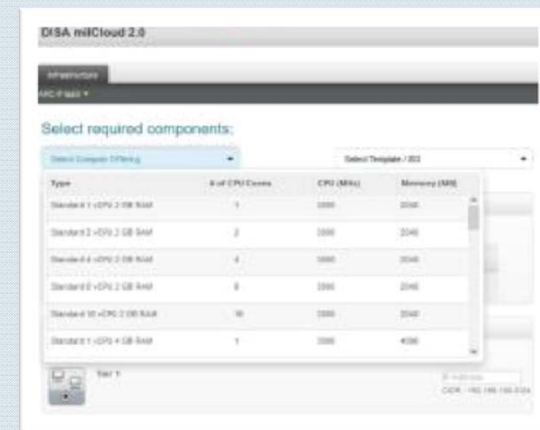
Migration Support

Migration / Consulting

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Planning for Success	Application Rationalization	Design & Development	Change Management	Security & Validation	Migration	Operationalizing
We build strategies to help match consumer needs to on-premise or cloud strategies that account for a wide range of constraints typical among government consumers.	Often the benefit of migrating to milCloud® 2.0 can be augmented by ensuring consumers manage a standardized application portfolio focused on the mission outcomes.	With CMMI certified agile development teams, we can support performance optimization, scalability, interoperability, and management of cloud-based solutions and host development environments for continuous innovation.	Our OCM experts help people plan and process changes to better focus the workforce on an organization's cloud future.	The enhancement security of the milCloud® 2.0 environment includes ensuring sensitive systems maintain data integrity and protect information – our certified security experts can work with security teams to ensure applications are resilient in both architecture and operations.	Our migration experts will plan and execute the inventory, transfer and validation of data and systems.	With proven set of tailorable standard operating procedure for replication backup, disaster recovery, continuality of operations, information assurance, we ensure the management of milCloud® 2.0 services aligns with the specific needs of consumers.

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milCloud® 2.0 – Other Services

- **IL 5 PA achieved March 2018**
  - **Future Offerings: milCloud®+ (provided by DISA)**
    - DISA offering similar to milCloud 1.0
    - System Administration and OS maintenance
    - Optional fee for App and DB support
  - **Engineering and Transition Services (provided by CSRA)**
  - **CSSP Services (provided by DISA)**
    - Endpoint Security and asset scanning (HBSS, ACAS)
- **On the Horizon: Preparing to implement**
  - **Platform-as-a-Service**
    - Red Hat OpenShift by CSRA
  - **Software-as-a-Service**
  - **SIPR**

Other Services – CSRA provided

Product Families	High-Level Description
IA Operations	Regulatory / STIG
Identity Management	Application Identity Management and Provisioning (IAM, PKI, Provisioning)
Configuration Management Service	By Endpoint, By Sensor, By Network
Systems Administration	Supporting CENTOS, Linux, Windows Server, Windows 10
Database Administration	Supporting SQL, Oracle, and NOSQL
Web Server Administration	Supporting Apache, IIS, and Tomcat
Future Services	Additional services will be provided over time to meet customer demand

Roadmap / Schedule

Timeline:

- Jul 17
- Oct 17
- Jan 18
- AFCEA West Launch
- IL 5 PA Early Adopters On boarded
- Mar 18
- AFCEA DCO Launch
- Jul 18
- Oct 18
- Jan 19

Milestones: NIPR IATT · NIPR IOC · SIPR IATT · SIPR IOC · FOC

Process chevrons:
CONUS NIPR Site Surveys → CONUS NIPR Install / Config → NIPR Early Adopter Migration → NIPR Accreditation / Portal → NIPR Launch → SIPR Site Surveys → SIPR Install / Config → SIPR Early Adopter Migration → SIPR Accreditation / Portal

Scale with NexGen Compute / Storage Solutions

Expand PaaS, SaaS Offerings

Baseline
- NIPR IaaS
- Other Services
- Consulting
- Portal R1 (Agile)

Innovation Cycle 1
- Expanded IaaS
- PaaS
- SaaS
- Modernization / Scale
- Expanded Other Services

Innovation Cycle 2
- Expanded IaaS
- Expanded PaaS
- Expanded SaaS
- Modernization / Scale
- Expanded Other Services
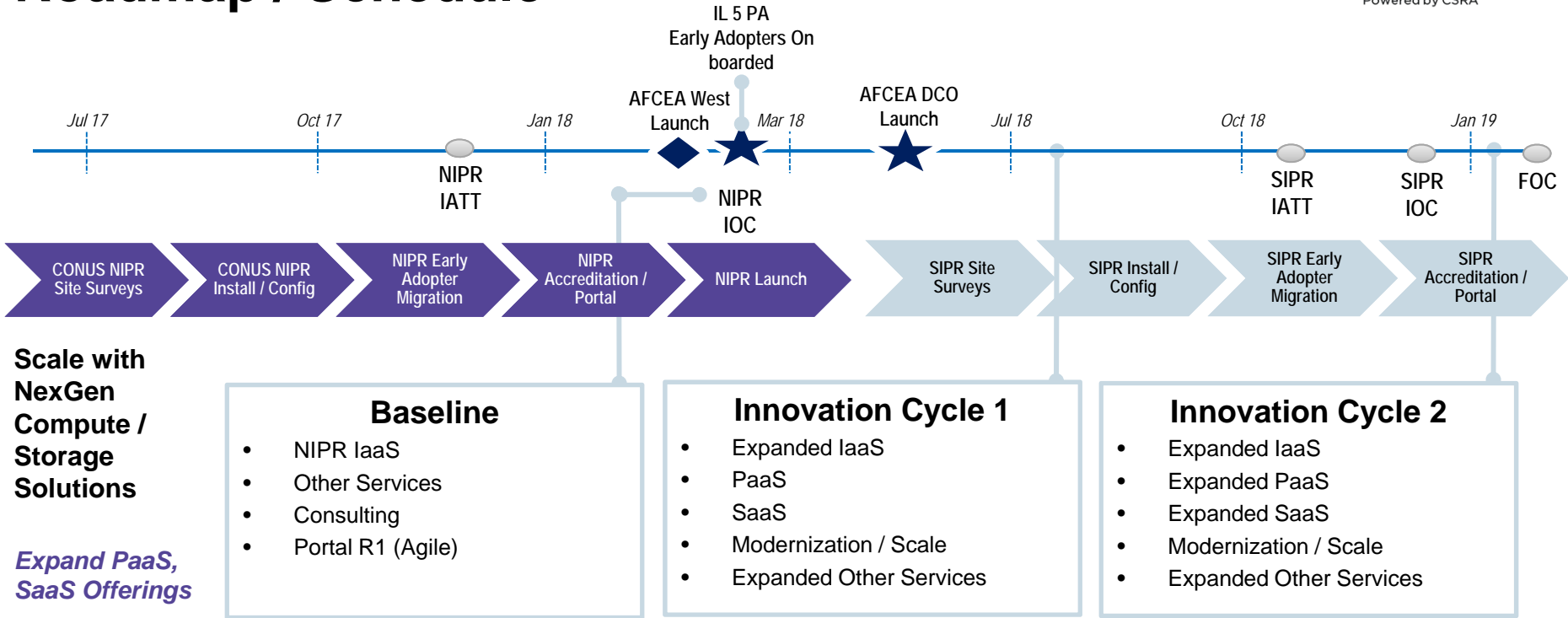
Thank you!

For more information please contact

disa.milcloud2@mail.mil or visit **www.disa.mil/Computing/Cloud-Services/milCloud**

milcloud@csra.com or visit **www.csra.com/milCloud**